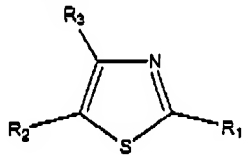
Serial No. 10/738,412 Docket No. SC65U-US

The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A cosmetic or pharmaceutical composition for topical application comprising an advanced glycation endproduct inhibiting or cleaving compound of the formula



wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; NH_2; NR_aR_b; SH; SR; CN; halogen; OH; OR; SO_3^-; SO_3R; NO_2; NO; C(=O)H; C(=O)R; C(=O)OH; C(=O)OR; $C(=O)NR_aR_b$; where R is selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; and where R_a and R_b are independently selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups;

or a salt thereof;

and a cosmetically or pharmaceutically acceptable vehicle;

wherein said compound is present in an effective amount for improving the appearance of skin when applied topically to the skin.

2. (Original) The composition of claim 1, wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_4 alkyl, alkenyl, alkynyl groups; NH_2; SH; SR; CN; OH; or OR; where R is selected from substituted or unsubstituted C_1-C_4 alkyl, alkenyl, and alkynyl groups.

3. (Original) The composition of claim 2, wherein R_1 is NH_2 and R_2 and R_3 are independently selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, vinyl, allyl, methoxy, ethoxy, propoxy, and butoxy.

4. (Original) The composition of claim 2, wherein R_3 is NH_2 and R_1 and R_3 are independently selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, vinyl, allyl, methoxy, ethoxy, propoxy, and butoxy.

5. (Original) The composition of claim 3, wherein R_2 is CH_3.

6. (Original) The composition of claim 4, wherein R_3 is CH_3.

7. (Original) The composition of claim 2, wherein R_1 is NH_2.

8. (Original) The composition of claim 2, wherein R_3 is NH_2.

9. (Original) The composition of claim 3, wherein R_2 and R_3 are CH_3.

10. (Original) The composition of claim 1, wherein said compound comprises from about 0.01 to about 30 weight % of the total composition.

11. (Original) The composition of claim 10, wherein said compound comprises from about 0.5 to about 20 weight % of the total composition.

12. (Original) The composition of claim 11, wherein said compound comprises from about 1 to about 5 weight % of the total composition.

13. (Original) The composition of claim 1, wherein said compound is 2-Amino-4,5-dimethylthiazole, or a salt thereof.

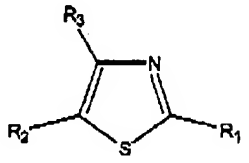
14. (Original) The composition of claim 13, wherein said compound is the hydrochloride salt of 2-amino-4,5-dimethylthiazole.

15. (Original) The composition of claim 1, wherein said compound is present in an amount effective for treating or preventing advanced glycation end product related skin conditions.

16. (Original) The composition of claim 15, wherein said compound is present in an amount effective to inhibit or cleave advanced glycation end products in the skin.

17. (Original) The composition of claim 1, wherein said compound is present in an amount effective to inhibit glucose oxidase in the skin.

18. (Original) A composition comprising a glucose oxidase inhibiting compound of the formula



wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; NH_2; NR_aR_b; SH; SR; CN; halogen; OH; OR; SO_3^-; SO_3R; NO_2; NO; C(=O)H; C(=O)R; C(=O)OH; C(=O)OR; $C(=O)NR_aR_b$; where R is selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; and where R_a and R_b are independently selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups;

or a salt thereof;

wherein said compound is present in an amount effective for inhibiting glucose oxidase or for treating or preventing advanced glycation end product related conditions.

19. (Original) The composition of claim 18, wherein said compound comprises from about 0.01 to about 30 weight % of the total composition.

20. (Original) The composition of claim 18, wherein said compound comprises from about 1 to about 5 weight % of the total composition.

21. (Original) The composition of claim 18, wherein said compound is 2-Amino-4,5-dimethylthiazole or a salt thereof.

22. (Original) The composition of claim 21, wherein said compound is the hydrochloride salt of 2-amino-4,5-dimethylthiazole.

23. (Original) A cosmetic or pharmaceutical composition for topical application for preventing, treating, or reversing a condition associated with advanced glycation endproducts

comprising 2-amino-4,5-dimethylthiazole or a salt thereof and a cosmetically or pharmaceutically acceptable vehicle, wherein said 2-amino-4,5-dimethylthiazole or salt thereof is present in an effective amount for treating, preventing, or reversing advanced glycation enproduct related conditions when applied topically to the skin.

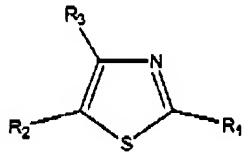
24. (Original) The composition of claim 23, wherein said 2-amino-4,5-dimethylthiazole or salt thereof comprises from about 0.01 to about 30 weight % of the total composition.

25. (Original) The composition of claim 24, wherein said 2-amino-4,5-dimethylthiazole or salt thereof comprises from about 0.5 to about 20 weight % of the total composition.

26. (Original) The composition of claim 25, wherein said 2-amino-4,5-dimethylthiazole or salt thereof comprises from about 1 to about 5 weight % of the total composition.

27. (Original) The composition of claim 23 comprising the hydrochloride salt of 2-amino-4,5-dimethylthiazole.

28. (Original) A method for improving the appearance of skin, said method comprising topically applying to the skin a composition having an effective amount of an advanced glycation endproduct inhibiting or cleaving compound of the formula



wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; NH_2; NR_aR_b; SH; SR; CN; halogen; OH; OR; SO_3^-; SO_3R; NO_2; NO; C(=O)H; C(=O)R; C(=O)OH; C(=O)OR; $C(=O)NR_aR_b$; where R is selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; and where R_a and R_b are independently selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups;

or a salt thereof;

and a cosmetically or pharmaceutically acceptable vehicle.

29. (Original) The method of claim 28, wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_4 alkyl, alkenyl, alkynyl groups; NH_2; SH; SR; CN; OH; or OR; where R is selected from substituted or unsubstituted C_1-C_4 alkyl, alkenyl, and alkynyl groups.

30. (Original) The method of claim 29, wherein R_1 is NH_2 and R_2 and R_3 are independently selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, vinyl, allyl, methoxy, ethoxy, propoxy, and butoxy.

31. (Original) The method of claim 28, wherein R_3 is NH_2 and R_1 and R_3 are independently selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, vinyl, allyl, methoxy, ethoxy, propoxy, and butoxy.

32. (Original) The method of claim 30, wherein R_2 is CH_3.

33. (Original) The method of claim 31, wherein R_3 is CH_3.

34. (Original) The method of claim 29, wherein R_1 is NH_2.

35. (Original) The method of claim 29, wherein R_3 is NH_2.

36. (Original) The method of claim 30, wherein R_2 and R_3 are CH_3.

37. (Original) The method of claim 28, wherein said compound is 2-amino-4,5-dimethylthiazole or a salt thereof.

38. (Original) The method of claim 37, wherein said compound is the hydrochloride salt of 2-amino-4,5-dimethylthiazole.

39. (Original) The method of claim 28, wherein said improvement is to a condition selected from the group consisting of: wrinkling, facial lines, dermatological signs of aging, loss

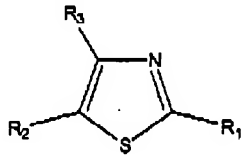
of skin tone, loss of collagen, loss of elastin, loss of skin firmness, poor skin texture, loss of skin luster, loss of skin elasticity or resiliency, and thin skin.

40. (Original) The method of claim 28, wherein said compound is present in an amount effective for treating or preventing advanced glycation end product related skin conditions.

41. (Original) The method of claim 40, wherein said compound is present in an amount effective to inhibit or cleave advanced glycation end products in the skin.

42. (Original) The method of claim 28, wherein said compound is present in an amount effective to inhibit glucose oxidase in the skin.

43. (Original) A method for treating or preventing advanced glycation endproduct related conditions comprising administering an effective amount of an advanced glycation endproduct inhibiting or cleaving compound of the formula



wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; NH_2; NR_aR_b; SH; SR; CN; halogen; OH; OR; SO_3^-; SO_3R; NO_2; NO; C(=O)H; C(=O)R; C(=O)OH; C(=O)OR; $C(=O)NR_aR_b$; where R is selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; and where R_a and R_b are independently selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups;

or a salt thereof.

44. (Original) The method of claim 43, wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_4 alkyl, alkenyl, alkynyl groups; NH_2; SH; SR; CN; OH; or OR; where R is selected from substituted or unsubstituted C_1-C_4 alkyl, alkenyl, and alkynyl groups.

45. (Original) The method of claim 44, wherein R_2 and R_3 are CH_3 and R_1 is NH_2.

46. (Original) The method of claim 43, wherein said compound comprises from about 0.01 to about 30 weight % of the total composition.

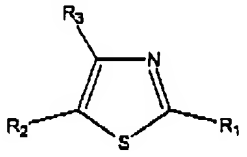
47. (Original) The method of claim 43, wherein said compound comprises from about 1 to about 5 weight % of the total composition.

48. (Original) The method of claim 43, wherein said compound is 2-amino-4,5-dimethylthiazole or a salt thereof.

49. (Original) The method of claim 48, wherein said compound is the hydrochloride salt of 2-amino-4,5-dimethylthiazole.

50. (Original) The method of claim 43, wherein said condition is selected from the group consisting of diabetes, rheumatoid arthritis, Alzheimer's disease, uremia, neurotoxicity, and atherosclerosis.

51. (Original) A method for inhibiting glucose oxidase comprising administering a glucose oxidase inhibiting compound of the formula



wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; NH_2; NR_aR_b; SH; SR; CN; halogen; OH; OR; SO_3^-; SO_3R; NO_2; NO; C(=O)H; C(=O)R; C(=O)OH; C(=O)OR; $C(=O)NR_aR_b$; where R is selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups; and where R_a and R_b are independently selected from H, substituted or unsubstituted C_1-C_{10} alkyl, alkenyl, alkynyl, aryl, cycloalkyl, and heterocyclic groups;

or a salt thereof.

52. (Original) The method of claim 51, wherein R_1, R_2, and R_3 are independently selected from H; substituted or unsubstituted C_1-C_4 alkyl, alkenyl, alkynyl groups; NH_2; SH; SR;

CN; OH; or OR; where R is selected from substituted or unsubstituted C_1-C_4 alkyl, alkenyl, and alkynyl groups.

53. (Original) The method of claim 52, wherein R_2 and R_3 are CH_3 and R_1 is NH_2.

54. (Original) The method of claim 51, wherein said compound is the hydrochloride salt of 2-amino-4,5-dimethylthiazole.

55. (Original) A method for improving the appearance of skin comprising topically applying to the skin a composition having an effective ampount of 2-amino-4,5-dimethylthiazole or a salt thereof, and a cosmetically or pharmaceutically acceptable vehicle.

56. (Original) The method of claim 55, wherein said 2-amino-4,5-dimethylthiazole is present as a hydrochloride salt.

57. (Original) The method of claim 55, wherein said improvement is to a condition selected from the group consisting of: wrinkling, facial lines, dermatological signs of aging, loss of skin tone, loss of collagen, loss of elastin, loss of skin firmness, poor skin texture, loss of skin luster, loss of skin elasticity or resiliency, and thin skin.